

(Applicant's Remarks are set forth hereinbelow, starting on the following page.)

REMARKS

In light of the foregoing, the objections to the Specification and Claims as well as the rejection of Claim 40 under 35 U.S.C. § 112 ¶2 are deemed fully addressed.

The PTO is asked to reconsider the eleven overlapping rejections and reduce the same to the best prior art in accordance with normal Office practice. These rejections do not serve the purpose of focusing the issues. In fact, they do the contrary. In an effort to assist in the process, applicants have substantially reduced the claims to allow the Examiner to focus on the best reference. In this connection, the cancellation of Claim 39 renders the rejection under 35 U.S.C. § 103(a) moot, thereby not requiring further comment.

The several rejections under 35 U.S.C. § 102 found at pages 3 through 8 of the Office Action are each traversed. Reconsideration is requested in light of the foregoing amendments and following remarks.

None of the cited references, either singly or even in some hypothetical combination unbiased by impermissible hindsight, teach or suggest a distinguishing characteristic of the claimed invention, i.e., an arrangement in which, as the exhaust gas is guided directly to the catalyst, the exhaust gas directly heats and quickly warms up the catalyst to minimize retardation of catalyst activation.

With regard to the several cited references, including those which have not been applied against the claim, applicants comment as follows:

Novak et al '081, Fig. 1, shows the exhaust gas flowing through the bypass duct 23 and colliding with a wall of the exhaust pipe 11 inasmuch as the bypass duct 23 connects at right angle to the exhaust pipe 11. The exhaust gas is thereby cooled, making it difficult for the catalyst to be heated quickly. In the present invention, however, the exhaust gas catalyst inlet port (or the bypass exhaust passage) is provided so as to directly guide the exhaust gas to the catalyst with the straight pipe or by providing small flow passage resistance thereof. The exhaust gas goes through the catalyst inlet port (or bypass exhaust passage), and the catalyst can be heated quickly so as to obtain the quick activation of the catalyst.

Novak et al teaches that the exhaust gas flows through the bypass duct to collide with a wall of the exhaust pipe. The catalyst cannot be heated quickly, and the catalyst activation is not fast.

Iwamoto et al, Fig. 1, shows the exhaust gas from the bypass passage 10 flowing to collide with a wall of the exhaust duct 11. Consequently, the converter 45 cannot be heated quickly, nor can the activation of the catalyst converter 45 occur quickly.

Nohira et al, Fig 1, shows the exhaust gas from the bypass page 26 flowing to collide with a wall of the exhaust duct 23. Again, the converter 24 cannot be heated quickly and catalyst converter activation is not fast.

Yoshikawa et al shows a fan construction without any characteristic feature of the present invention.

Danno et al, Fig. 1, shows a waste gate valve 6 provided on an exhaust passage and controlled to be opened and closed by a pressure responsive device 7, in order to achieve two supercharged pressure characteristics. The waste gate valve 6 which is quite different than in the present invention is not controlled, like the open/close valve of the present invention, to open and close the exhaust gas catalyst inlet port in Claim 1 (or bypass exhaust passage or straight pipe) when the engine starts.

Kageyama et al shows the exhaust gas from the bypass passage 116 is controlled so as not to unnecessarily pass through the catalyst converter 110 to avoid very hot exhaust gas inhibiting activation of the converter 110.

Kibe et al also shows that the exhaust gas from the bypass 28 is controlled so as not to unnecessarily pass through the converter 16.

None of the cited prior art teaches an exhaust gas guided directly to the catalyst in one of two ways, namely, straight to the catalyst (e.g., way of a straight pipe) or by making the flow resistance of the bypass exhaust passage smaller than the flow passage resistance of the exhaust gas passage.

Accordingly, early and favorable action upon the claims remaining in this application are earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.


If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and

please charge any deficiency in fees or credit any overpayments to Deposit

Account No. 05-1323 (Docket # 381NP/50238).

Respectfully submitted,

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